

East Building, PHH-30 1200 New Jersey Avenue S.E. Washington, D.C. 20590

Pipeline and Hazardous Materials Safety Administration

DOT-SP 14735

EXPIRATION DATE: December 31, 2008

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. <u>GRANTEE</u>: Teledyne Energy Systems, Inc. Hunt Valley, MD

2. PURPOSE AND LIMITATION:

- a. This emergency special permit authorizes the transportation in commerce of certain hydrogen generators containing electrolysis modules filled with potassium hydroxide solution in excess of the amount authorized for shipment as Dangerous Goods in Apparatus. This special permit provides no relief from the hazardous materials regulations (HMR) other than as specifically stated herein.
- b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.
- c. No party status will be granted to this special permit.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
- 4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.222(c) in that the amount of hazardous material contained within an apparatus may not exceed 0.5 liter, except as provided herein.

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5. <u>BASIS</u>: This emergency special permit is based on the application of Teledyne Energy Systems, Inc. dated June 27, 2008, and additional information dated July 23, 2008, submitted in accordance with § 107.117 and a determination that it is necessary to prevent significant economic loss.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

| Hazardous Materials Description | | | |
|--|------------------------------|-------------------------------|------------------|
| Proper shipping name | Hazard Class/ Division | Identi- fication Number | Packing Group |
| Dangerous Goods in Machinery <i>or</i> Dangerous Goods in Apparatus | 9 | UN3363 | N/A |
| Potassium Hydroxide, solution | 8 | UN1814 | II, III |

7. SAFETY CONTROL MEASURES:

a. PACKAGING -

- (1) Packaging prescribed is a hydrogen generator containing one or more electrolysis (EC) modules. The hydrogen generator and EC modules must comply with the Teledyne Energy Systems, Inc. drawings and specifications on file with the Office of Hazardous Materials Special Permits & Approvals (OHMSPA).
- (2) Each EC module is ASME Code "U" stamped pressure vessel with a maximum allowable working pressure of 150 psig. The EC modules is fabricated from schedule 40 stainless steel pipe with a minimum thickness of 0.322 inch.
- (3) Each EC module or generator must be overpacked in strong outer packagings suitable for transportation and otherwise conform to the requirements for dangerous goods in apparatus.
- b. <u>TESTING</u> Each EC module must be pressure tested to a minimum of two times the maximum allowable working pressure at the time of manufacture.

c. OPERATIONAL CONTROLS -

- (1) The potassium hydroxide solution must be fully contained within the EC modules and each EC module may contain no more than 102.2 L of potassium hydroxide solution.
- (2) Each EC module or generator must be assembled, packed, and prepared by Teledyne Energy Systems, Inc. employees.
- (3) Each package must be secured against movement by blocking and bracing in the transport vehicle.

8. SPECIAL PROVISIONS:

- a. A person who is not a holder of this special permit who receives a package covered by this special permit may reoffer it for transportation provided no modifications or changes are made to the package or its contents and it is reoffered for transportation in conformance with this special permit and the HMR.
- b. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

c. MARKING -

- (1) Each EC module or generator must be plainly and durably marked "DOT-SP 14735" as specified in § 172.301(c).
- (2) Each outside packaging must be marked "INSIDE EQUIPMENT COMPLIES WITH DOT-SP 14735".
- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, and cargo vessel.
- 10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel or motor vehicle used to transport packages covered by this special permit.

- 11. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 <u>et</u> seq:
 - o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
 - o Registration required by § 107.601 $\underline{\text{et seq.}}$, when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)- 'The Hazardous Materials Safety and Security Reauthorization Act of 2005' (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of

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this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

for Theodore L. Willke

Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

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